

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions and listings of claims in the application.

Listing of claims:

Claims 1-21 (Canceled).

Claim 22. (Currently amended) A communication system controller comprising:
interface circuitry for ~~communicating, with~~ receiving from an information transmission device, information requesting setup of a call path between a first communication network and a second communication network, and for sending to the information transmission device, and parameters for configuring the information transmission device to cause setup of the requested call path, ~~wherein the parameters for configuring the information transmission device comprise information specifically related to the conversion, by the information transmission device, of digitized voice information into an analog voice signal, and of an analog voice signal into digitized voice information;~~

at least one processor operably coupled to the interface circuitry and to memory arranged to store digitized voice information; and

operational software executable by the at least one processor, the operational software causing the at least one processor to produce the parameters for configuring the information transmission device based upon the information requesting setup of a call, the information transmission device thereby communicatively coupling one of a plurality of the first communication network[[s]] to another of the plurality of second communication networks, network; and

wherein the call path passes through the information transmission device.

Claim 23. (Currently amended) The controller of claim 22 wherein one of the first the plurality of communication network[[s]] and the second communication network comprises a packet network.

Claim 24. (Previously presented) The controller of claim 23 wherein the packet network communicates using an Internet protocol (IP).

Claim 25. (Previously presented) The controller of claim 24 wherein the Internet protocol (IP) comprises the transmission control protocol (TCP)/Internet protocol (IP).

Claim 26. (Previously presented) The controller of claim 23 wherein the packet network comprises a wireless network.

Claim 27. (Currently amended) The controller of claim 22 wherein one of the first the plurality of communication network[[s]] and the second communication network comprises a conventional telephone switching network.

Claim 28. (Currently amended) The controller of claim 27 wherein the information transmission device communicates with the conventional telephone switching network ~~communicates~~ using analog signals.

Claim 29. (Previously presented) The controller of claim 22 further comprising a packet network interface for communicating using a packet protocol.

Claim 30. (Previously presented) The controller of claim 29 wherein the packet protocol is compliant with an Ethernet protocol.

Claim 31. (Previously presented) The controller of claim 29 wherein the packets communicated via the packet network interface comprise digitized voice information.

Claim 32. (Previously presented) The controller of claim 29 wherein the packets communicated via the packet network interface comprise non-voice data.

Claim 33. (Previously presented) The controller of claim 32 wherein at least a portion of the non-voice data is unrelated to the communication of digitized voice information.

Claim 34. (Previously presented) The controller of claim 22 wherein the operational software is capable of determining a routing for the requested call.

Claim 35. (Previously presented) The controller of claim 34 wherein the routing is determined based upon a cost of use of a communication network.

Claim 36. (Previously presented) The controller of claim 34 wherein the routing is based upon predefined call routing information.

Claim 37. (Previously presented) The controller of claim 22 wherein the information requesting setup of a call comprises information related to telephony signals received by the information transmission device.

Claim 38. (Previously presented) The controller of claim 37 wherein the telephony signals received comprise at least one of dual tone multi-frequency (DTMF) signals, dial tone, a ring signal, on-hook, off-hook, and call progress tones.

Claim 39. (Previously presented) The controller of claim 22 wherein the parameters for configuring the information transmission device comprise information related to telephony signals generated by the information transmission device.

Claim 40. (Previously presented) The controller of claim 39 wherein the telephony signals generated by the information transmission device comprise at least one of dual tone multi-frequency (DTMF) signals, dial tone, a busy signal, and a ringing signal.

Claim 41. (Cancelled)

Claim 42. (Previously presented) The controller of claim 22 wherein the parameters for configuring the information transmission device comprise information related to the buffering of digitized voice information for a predefined period of time to minimize gaps in an analog voice signal.

Claim 43. (Previously presented) The controller of claim 22 wherein the parameters for configuring the information transmission device comprise information related to at least one of a battery supply, over-voltage protection, ringing current, tone generation, tone detection, two wire to four wire conversion, and test functionality.

Claim 44. (Previously presented) The controller of claim 22 wherein the operational software is capable of reducing the quantity of digitized voice information communicated via the information transmission device, by changing the packetization of digitized voice information when voice activity on one of the plurality of communication networks falls below a predetermined level.

Claim 45. (Previously presented) The controller of claim 22 wherein the interface circuitry is capable of communicating digitized voice information with the information transmission device.

Claim 46. (Previously presented) The controller of claim 22 wherein the communication system controller and the information transmission device are located within the same housing.

Claim 47. (Currently amended) A communication system controller comprising:
interface circuitry arranged to deliver configuration information to a system for communicatively coupling ~~one of a plurality of a first~~ a first communication network[s] to a second communication network ~~another of the plurality of communication networks~~

based upon the configuration information, wherein the configuration information is responsive to information requesting setup of a call path between the first communication network and the second communication network received from the system ~~comprises information specifically related to the conversion, by the system, of digitized voice information into an analog voice signal, and of an analog voice signal into digitized voice information;~~

~~storage capable of containing~~ arranged to contain operational software software, digitized voice information, and call routing information; and

at least one processor operably coupled to the interface circuitry, the at least one processor ~~capable of~~ arranged to access[[ing]] the operational software and call routing information, the operational software functioning at least to cause the at least one processor to produce the configuration information based upon call setup information and the call routing information.

Claim 48. (Currently amended) The controller of claim 47 wherein one of the plurality of first communication network[[s]] and the second communication network comprises a packet network.

Claim 49. (Previously presented) The controller of claim 48 wherein at least a portion of the packets transported by the packet network comprise digitized voice information.

Claim 50. (Previously presented) The controller of claim 48 wherein the packet network uses an Internet protocol (IP).

Claim 51. (Previously presented) The controller of claim 50 wherein the Internet protocol comprises the transmission control protocol (TCP)/Internet protocol (IP).

Claim 52. (Currently amended) The controller of claim 47 wherein one of the plurality of first communication network[s]] and the second communication network comprises a conventional telephone switching network.

Claim 53. (Currently amended) The controller of claim 52 wherein the information transmission device communicates with the conventional telephone switching network uses using analog signals.

Claim 54. (Currently amended) The controller of claim 47 wherein the call setup information is received via one of the plurality of first communication network[s]] and the second communication network.

Claim 55. (Previously presented) The controller of claim 47 further comprising:
a network interface adapted to communicate using a wired network.

Claim 56. (Previously presented) The controller of claim 55 wherein the wired network comprises an Ethernet compatible network.

Claim 57. (Previously presented) The controller of claim 55 wherein the call setup information is received via the wired network.

Claim 58. (Previously presented) The controller of claim 47 wherein the call setup information comprises a destination address.

Claim 59. (Previously presented) The controller of claim 47 wherein the call routing information comprises at least one association of a destination address and a call route.

Claim 60. (Currently amended) A non-transitory computer-readable storage having stored thereon a computer program having a plurality of code sections for

implementing a communication system controller for controlling an information transmission device for communicatively coupling ~~one of a plurality of~~ a first communication network[[s]] to a second ~~of the plurality of~~ communication network[[s]], the code sections executable by a machine for causing the machine to perform the operations comprising:

storing call routing information in at least one memory of the communication system controller ~~received from a user at a first location~~;

accepting a call setup request, from a first location via the ~~one of the plurality of~~ first communication network or the second communication network[[s]], the call setup request comprising a destination address corresponding to a second location;

determining a call route between the first location and the second location based upon the call setup request and the stored call routing information;

generating configuration information using at least one of the call setup request and the stored call routing information, ~~wherein the configuration information comprises information specifically related to the conversion, by the information transmission device, of digitized voice information into an analog voice signal, and of an analog voice signal into digitized voice information~~; and

providing the configuration information to the information transmission device to cause communicative coupling of the ~~one of a plurality of~~ first communication network[[s]] to the second ~~of the plurality of~~ communication network[[s]] in order to establish the requested call.

Claim 61. (Currently amended) The non-transitory computer-readable storage of claim 60 wherein one of the ~~plurality of~~ first communication network[[s]] and the second communication network comprises a packet network.

Claim 62. (Previously presented) The non-transitory computer-readable storage of claim 61 wherein the packet network communicates using an Internet protocol (IP).

Claim 63. (Previously presented) The non-transitory computer-readable storage of claim 62 wherein the Internet protocol (IP) comprises the transmission control protocol (TCP)/Internet protocol (IP).

Claim 64. (Previously presented) The non-transitory computer-readable storage of claim 61 wherein the packet network comprises a wireless network.

Claim 65. (Currently amended) The non-transitory computer-readable storage of claim 60 wherein one of the plurality of first communication network[[s]] and the second communication network comprises a conventional telephone switching network.

Claim 66. (Currently amended) The non-transitory computer-readable storage of claim 65 wherein the information transmission device communicates with the conventional telephone switching network ~~communicates~~ using analog signals.

Claim 67. (Currently amended) The non-transitory computer-readable storage of claim 60 wherein the determining comprises:

determining whether call routing information corresponding to the destination address is available using the stored call routing information and the destination address;

prompting ~~[[the]]~~ a user for call routing information, if call routing information corresponding to the destination address is not available; and

refraining from prompting the user, if call routing information corresponding to the destination address is available.

Claim 68. (Previously presented) The non-transitory computer-readable storage of claim 60 further comprising:

sending to the second location a call setup request.

Claim 69. (Previously presented) The non-transitory computer-readable storage of claim 60 further comprising:

receiving from the second location acceptance of a call setup request.

Claim 70. (New) The controller of claim 22, wherein the parameters for configuring the information transmission device comprise information specifically related to conversion, by the information transmission device, of digitized voice information received from the first communication network into an analog voice signal for transmission using the second communication network, and to conversion of an analog voice signal received from the second communication network into digitized voice information for transmission using the first communication network.

Claim 71. (New) The controller of claim 22, wherein the at least one processor is arranged to transmit a portion of the stored digitized voice information via the interface circuitry to the information transmission device for playback on a communication network coupled to the information transmission device.

Claim 72. (New) The controller of claim 22, wherein the at least one processor is arranged to store in the memory, digitized voice information received by the at least one processor via the interface circuitry from the information transmission device, the digitized voice information representative of voice from a communication network coupled to the information transmission device.

Claim 73. (New) The controller of claim 22, wherein the at least one processor is arranged to select the second network according to at least one association of a call destination and a corresponding communication network for a call to the call destination, the at least one association stored in the memory.

Claim 74. (New) The controller of claim 47, wherein the configuration information comprises information specifically related to conversion, by the information

transmission device, of digitized voice information received from the first communication network into an analog voice signal for transmission using the second communication network, and to conversion of an analog voice signal received from the second communication network into digitized voice information for transmission using the first communication network.

Claim 75. (New) The controller of claim 47, wherein the at least one processor is arranged to transmit a portion of the stored digitized voice information to the information transmission device for playback on a communication network coupled to the information transmission device.

Claim 76. (New) The controller of claim 47, wherein the at least one processor is arranged to store in the storage, digitized voice information received by the at least one processor from the information transmission device, the digitized voice information representative of voice from a communication network coupled to the information transmission device.

Claim 77. (New) The controller of claim 47, wherein the at least one processor is arranged to select the second network according to at least one association of a call destination and a corresponding communication network for a call to the call destination, the at least one association residing in the storage.

Claim 78. (New) The non-transitory computer-readable storage of claim 60, wherein the configuration information comprises information specifically related to conversion, by the information transmission device, of digitized voice information received from the first communication network into an analog voice signal for transmission using the second communication network, and to conversion of an analog voice signal received from the second communication network into digitized voice information for transmission using the first communication network.

Claim 79. (New) The non-transitory computer-readable storage of claim 60, the operations comprising:

transmitting digitized voice information from the at least one memory to the information transmission device for playback on a communication network coupled to the information transmission device.

Claim 80. (New) The non-transitory computer-readable storage of claim 60, the operations comprising:

storing in the at least one memory, digitized voice information received from the information transmission device, the digitized voice information representative of voice from a communication network coupled to the information transmission device.

Claim 81. (New) The non-transitory computer-readable storage of claim 60, the operations comprising:

selecting the second network according to at least one association of a call destination and a corresponding communication network for making the requested call to the call destination, the at least one association residing in the at least one memory.